

CLAIMS

- [1] A Stirling engine comprising:
- a cylinder;
 - a piston reciprocatably disposed inside the cylinder;
 - a displacer that reciprocates with a phase difference relative to the piston;
 - a linear motor that drives the piston; and
 - a pressure vessel that encloses the cylinder, the piston, and the linear motor,
- wherein the pressure vessel has a division portion formed therein, the division portion being located closer to where the displacer is disposed than to a piston support end of the linear motor.
- [2] The Stirling engine of claim 1,
- wherein the division portion is located in a central portion of the linear motor along an axis thereof.
- [3] A Stirling engine comprising:
- a cylinder;
 - a cylinder reciprocatably disposed inside the piston;
 - a displacer that reciprocates with a phase difference relative to the piston;
 - a linear motor that drives the piston; and
 - a pressure vessel that encloses the cylinder, the piston, and the linear motor,
- wherein the pressure vessel has a division portion formed therein, the division portion being formed into a shape that permits both temporary sealing for sealing with a seal member and final sealing for sealing with welding.

- [4] The Stirling engine of claim 3,
wherein, in the division portion,
a flange-shaped portion is formed on at least one pressure vessel body,
a seal member placement clearance is formed in the flange-shaped portion, and
a welding position is located around an outer circumference of the flange-shaped
portion.
- [5] The Stirling engine of claim 3 or 4,
wherein the division portion is located closer to where the displacer is disposed than to
a piston support end of the linear motor.
- [6] The Stirling engine of claim 5,
wherein the division portion is located in a central portion of the linear motor along an
axis thereof.